

Notice of Allowability

Application No.

10/631,148

Applicant(s)

MAURER, RON

Examiner

Randolph Chu

Art Unit

2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 11/27/2007.
2. ☒ The allowed claim(s) is/are 1, 3-6, 9, 10, 13 (now renumbered 1-8 for issue).
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |

DETAILED ACTION

Examiners Amendment

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.
2. Authorization for this examiners amendment was given in a telephone interview with Michael Byorick on November 27, 2007.

Claims 31-36 are canceled.

Allowable Subject Matter

1. Claims 1, 3-6, 9, 10, 13 (now renumbered 1-8 for issue) are allowed.

The following is an examiner's statement of reasons for allowance:

Claims 1, 10 and 13 are allowable over the prior art of record because none of the prior art of record teaches the combined claimed elements as set forth in the claim 1, 10 and 13.

None of the prior art of record teaches or fairly suggests that image processing method for processing an image using a bilateral filter that pre-calculating the product of the photometric weight for each neighboring pixel j and the signal difference Δf_j between pixel j and center pixel i , to produce a signal value $PSI(\Delta f_j)$ representing the influence of neighboring pixel j ; storing each said value of PSI in a look-up table; and using a value of PSI in the look-up table corresponding to an instant value of Δf_j to calculate the contribution of the neighboring pixel j , by multiplying the value for pixel j with a corresponding convolution kernel coefficient K_j , and together with combination of other claimed elements as set forth in the independent claims 1, 10 and 13. Therefore, the claim 1, 10 and 13 are over the prior art of records.

Claim 9 is allowable over the prior art of record because none of the prior art of record teaches the combined claimed elements as set forth in the claim 1, 10 and 13.

None of the prior art of record teaches or fairly suggests that image processing method for processing an image using a bilateral filter that pre-calculating the photometric weight $g(\Delta f_j)$; storing each said value of photometric weight in a look-up table; and using a value of g in the look-up table corresponding to an instant value of a signal difference in one or more color-channels Δf_j to compute the bilateral weight of a neighboring pixel j , by multiplying the value for pixel j with a corresponding convolution

kernel coefficient K_j ; computing a bilateral correction term for each of the color channels, by multiplying the calculated bilateral weight of the neighboring pixel j with the signal differences Δc_j corresponding to each of the color channels; and adding each of the computed bilateral correction terms to the central pixel value for the corresponding channel, and together with combination of other claimed elements as set forth in the independent claims 9. Therefore, the claim 9 is over the prior art of records.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Randolph Chu whose telephone number is 571-270-1145. The examiner can normally be reached on Monday to Thursday from 7:30 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Bella can be reached on 571-272-7778. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you

Application/Control Number: 10/631,148
Art Unit: 2624

Page 5

have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RIC/

A handwritten signature in black ink, reading "Matthew C. Bella". The signature is fluid and cursive, with the first name "Matthew" being more prominent and the last name "Bella" following in a similar style.

MATTHEW C. BELLA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600